

Appendix A: Summary of Losses for Past IDFG Program Years

Table 5: Summary of losses and magnitude of mortality for BY94 through BY98 East Fork Salmon River captive chinook culture groups (IDFG 1999)

	Culture Groups		
	BY94	BY96	BY98
Starting Inventory (January 1, 1998)	37	5	
<u>Eyed-Egg to Fry</u>			
Undetermined ^b	n/a	n/a	46
<u>Mechanical Loss</u>			
Handling	1	0	0
Jump-out	2	0	0
<u>Non-infectious</u>			
Lymphosarcoma	0	0	0
Other ^c	6	0	0
<u>Infectious</u>			
Bacterial	0	0	0
Viral	0	0	0
Other	0	0	0
<u>Maturation</u>			
Mature Males ^d	5	0	0
Mature Females ^d	23	0	0
Other ^e	6	0	0
<u>Relocation</u>			
Transferred In ^f	18	0	0
Transferred Out ^g	0	5	0
Planted/Released	0	0	0
Ending Inventory (December 31, 1998)	12	0	

^a Fall 1998 “safety-net” progeny.

^b Typical egg to fry mortality includes non-hatching eggs, abnormal fry, and swim-up loss.

^c Includes culling associated with cultural abnormalities, and all undetermined, non-infectious mortality.

^d Spawned at Eagle Fish Hatchery.

^e Mature fish with non-viable gametes.

^f Transferred from the Manchester Marine Laboratory to Eagle Fish Hatchery for distribution and spawning.

^g Transferred from Eagle Fish Hatchery to the Manchester Marine Laboratory for seawater rearing.

^h Number of fry ponded in January 1999.

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Table 6: Summary of losses and magnitude of mortality for BY94, BY96, and BY97 West Fork Yankee Fork captive chinook culture groups (IDFG 1999)

	Culture Groups		
	BY94	BY96	BY97
Starting Inventory (January 1, 1998)	34	103	210 ^a
<u>Eyed-Egg to Fry</u> Undetermined	n/a	n/a	n/a
Mechanical Loss			
Handling	0	3	8
Jump-out	0	1	0
<u>Non-infectious</u>			
Lymphosarcoma	0	0	0
Other ^b	4	2	2
<u>Infectious</u>			
Bacterial	0	27 ^c	0
Viral	0	0	0
Other	0	0	0
<u>Maturation</u>			
Mature Males ^d	4	0	0
Mature Females ^d	3	0	0
Other	0	0	0
<u>Relocation</u>			
Transferred In	23 ^e	16 ^f	0
Transferred Out ^g	0	60	0
Planted/Released ^h	44	0	0
Ending Inventory (December 31, 1998)	2	26	200

^a Fall 1998 collections.

^b Includes culling associated with cultural abnormalities, and all undetermined, non-infectious mortality.

^c Mortality associated with bacterial kidney disease *Renibacterium salmoninarum* infection.

^d Spawmed at Eagle Fish Hatchery.

^e Transferred from the Manchester Marine Laboratory to Eagle Fish Hatchery for distribution and spawning.

^f Spring 1998 outmigrant collections.

^g Transferred from Eagle Fish Hatchery to the Manchester Marine Laboratory for seawater rearing.

^h Released for volitional spawning in 1998.

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Table 7: Summary of losses and magnitude of mortality for BY94 through BY97 Lemhi River captive chinook culture groups (IDFG 1999)

	Culture Groups			
	BY94	BY95	BY96	BY97
Starting Inventory (January 1, 1998)	49	59	177	147 ^a
<u>Eyed-Egg to Fry</u> Undetermined	n/a	n/a	n/a	n/a
<u>Mechanical Loss</u> Handling	2	4	13	2
Jump-out	2	0	0	2
<u>Non-infectious</u> Lymphosarcoma	0	0	0	0
Other ^b	8	5	2	5
<u>Infectious</u> Bacterial	0	1	1	0
Viral	0	0	0	0
Other	0	0	7 ^c	0
<u>Maturation</u> Mature Males ^d	0	8	2	0
Mature Females ^d	7	0	0	0
Other	2 ^e	0	1 ^f	3 ^f
<u>Relocation</u> Transferred In ^g	33	14	0	0
Transferred Out ^h	0	0	110	0
Planted/Released ⁱ	54	19	0	0
Ending Inventory (December 31, 1998)	7	36	41	135

^a Fall 1998 collections.

^b Includes culling associated with cultural abnormalities, and all undetermined, non-infectious mortality.

^c Attributed to parasitic copepod *Salmincola californensis* infestations.

^d Spawned at Eagle Fish Hatchery.

^e Mature fish with non-viable gametes.

^f Unspawned, precocial males.

^g Transferred from Manchester Marine Laboratory to Eagle Fish Hatchery for distribution and spawning.

^h Transferred from Eagle Fish Hatchery to the Manchester Marine Laboratory for seawater rearing.

ⁱ Released for volitional spawning in 1998.